



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,876	07/23/2001	Bernhard Scheuble	MERCK-1342 D1	5038
23599	7590	06/03/2004	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C.			DUONG, TAI V	
2200 CLARENDON BLVD.				
SUITE 1400			ART UNIT	PAPER NUMBER
ARLINGTON, VA 22201			2871	

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/909,876

Applicant(s)

SCHEUBLE ET AL.

Examiner

Tai Duong

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 15-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1 and 15-33 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Election/Restrictions

This application contains claims directed to the following patentably distinct species of the claimed invention:

A: claim 1 drawn to an electrooptical system containing a twisted nematic liquid crystal layer, the liquid crystal having a parallel edge alignment and a twist angle of $0^\circ \leq \beta \leq 100^\circ$ or a homeotropic alignment.

B: claim 18 drawn to an electrooptical system wherein the twist angle is $0^\circ \leq \beta \leq 45^\circ$.

C: claim 19 drawn to an electrooptical system wherein the twist angle is $0^\circ \leq \beta \leq 15^\circ$.

D: claim 20 drawn to an electrooptical system wherein the twist angle is $0^\circ \leq \beta \leq 5^\circ$.

E: claim 21 drawn to an electrooptical system wherein the twist angle β is essentially 0° .

F claim 22 drawn to an electrooptical system wherein the optical retardation $d \cdot \Delta n$ of the liquid crystal layer is $\leq 0.40 \mu\text{m}$.

G: claim 23 drawn to an electrooptical system wherein the optical retardation $d \cdot \Delta n$ of the liquid crystal layer is $\leq 0.30 \mu\text{m}$.

H: claim 24 drawn to an electrooptical system wherein the optical retardation $d \cdot \Delta n$ of the liquid crystal layer is essentially $0.28 \mu\text{m}$.

I: claim 25 drawn to an electrooptical system wherein the Δn of the liquid crystal is ≤ 0.0735 .

Art Unit: 2871

J: claim 26 drawn to an electrooptical system wherein the n of the liquid crystal satisfies the relationship $0.035 \leq \Delta n \leq 0.065$.

K: claim 27 drawn to an electrooptical system wherein the Δn of the liquid crystal is ≤ 0.056 .

L: claims 16, 17, 29 and 30 drawn to an electrooptical system containing one or more compensation layers.

M: claim 31 drawn to an electrooptical system containing only one polarization device and at least one reflector.

N: claim 32 drawn to an electrooptical system containing a liquid crystal layer of negative dielectric anisotropy, the liquid crystal having a homeotropic edge alignment and a twist angle of $0^\circ \leq \beta \leq 60^\circ$.

O: claim 33 drawn to an electrooptical system containing a twisted nematic liquid crystal layer, the liquid crystal having a homeotropic edge alignment, a twist angle of $0^\circ \leq \beta \leq 60^\circ$, and an optical path difference $d \cdot \Delta n$ of the liquid crystal layer is $\leq 0.40 \mu\text{m}$.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 15 and 28 are generic with respect to Species B-O.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims

Art Unit: 2871

readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Application/Control Number: 09/909,876
Art Unit: 2871


Page 5

Any inquiry concerning this communication should be directed to Tai Duong at telephone number (571) 272-2291.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


TVD

06/04


TOANTON
PRIMARY EXAMINER